Kinser, Robin D.

From:	Tricker, Anthony
Sent:	Sunday, June 16, 2002 9:53 AM
To:	Kinser, Robin D.
Cc:	Tricker, Anthony
Subject:	LC/MS/MS

Dear Robin,

In response to your request about the use of LC/MS/MS for TSNA analysis, here is some information: I could not find any publications on the use of LC/MS/MS for the analysis of NNK, NNN, NAB, and NAT in filler or smoke, but several publications on the use of LC/MS/MS for NNK metabolites. Just in case these are of any interest, I have listed them below:

S.E. Murphy et al., Glucuronidation of 4-((hydroxymethyl)nitrosamino)-1-(3-pyridyl)-1-butanone, a metabolically activated form of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, by phenobarbital-treated rats. Chem. Res. Toxicol., 8, 772-779, 1995.

P. Upadhyaya et al., Preparation of pyridine-N-glucuronides of tobacco-specific nitrosamines. Chem. Res. Toxicol., 14, 555-561, 2001.

S. Hecht et al., Quantitation of 4-oxo-4-(3-pyridyl)butanoic acid and enantiomers of 4-hydroxy-4-(3-pyridyl)butanoic acid in human urine: a substantial pathway of nicotine metabolism. Chem. Res. Toxicol., 12, 172-179, 1999.

S.G. Carmella et al., Stereochemistry of metabolites of a tobacco-specific lung carcinogen in smokers' urine. Cancer Res., 59, 3602-3605, 1999.

S.G. Carmella et l., Analysis of human urine for pyridine-N-oxide metabolites of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, a tobacco-specific lung carcinogen. Cancer Epidemiol. Biomarkers & Prev., 6, 113-120, 1997.

Best regards,
Tony

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